

#18

## SEQUENCE LISTING

<110> WATANABE, Eijiro  
OEDA, Kenji

<120> Raffinose Synthase Genes and Their Use

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<140> 08/992,914

<141> 1997-12-18

<150> 8-338673/1996 JAPAN

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<170> PatentIn Ver. 2.0

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Cys Gly Tyr Trp Gly Gly Val Arg Pro Gly Val His Gly Met Pro Lys 355 360 365		
Ala Arg Val Val Val Pro Lys Val Ser Gln Gly Leu Lys Met Thr Met 370 375 380		
Glu Asp Leu Ala Val Asp Lys Ile Val Glu Asn Gly Val Gly Leu Val 385 390 395 400		
Pro Pro Asp Phe Ala His Glu Met Phe Asp Gly Leu His Ser His Leu 405 410 415		
Glu Ser Ala Gly Ile Asp Gly Val Lys Val Asp Val Ile His Leu Leu 420 425 430		
Glu Leu Leu Ser Glu Glu Tyr Gly Gly Arg Val Glu Leu Ala Arg Ala 435 440 445		
Tyr Tyr Lys Ala Leu Thr Ser Ser Val Lys Lys His Phe Lys Gly Asn 450 455 460		
Gly Val Ile Ala Ser Met Glu His Cys Asn Asp Phe Phe Leu Leu Gly 465 470 475 480		
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Gly Ser Ile Leu Arg Cys Gln His Tyr Ala Leu Pro Thr Arg Asp Cys 580 585 590		
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Ser Gly Asp Pro Asn Gly Thr Tyr Trp Leu Gln Gly Cys His Met Val	
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His Cys Ala Tyr Asn Ser Leu Trp Met Gly Asn Phe Ile Gln Pro Asp	
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Trp Asp Met Phe Gln Ser Thr His Pro Cys Ala Glu Phe His Ala Ala	
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Glu Asp Pro Leu His Asp Gly Lys Thr Met Leu Lys Ile Trp Asn Leu	
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Trp Cys Pro Val Thr Arg Arg Asn Lys Ser Ala Ser Glu Phe Ser Gln	
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Ile Val Leu Ser Lys Lys Leu Ile Gln Phe Ala Pro Ile Gly Leu Val	
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Val Phe Ala Ser Glu Lys Pro Val Ser Cys Lys Leu Asp Gly Val Val	
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Val Lys Phe Asp Tyr Glu Asp Lys Met Leu Arg Val Gln Val Pro Trp	
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Pro Ser Ala Ser Lys Leu Ser Met Val Glu Phe Leu Phe	
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Ser Cys Leu Tyr Val His Val Gly His Asp Pro Tyr Gln Leu Leu Arg  
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 Cys Val Glu Ser Gly Ser Thr Lys Val Asn Glu Ser Ser Phe Arg Ala  
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Glu Lys Thr Pro Pro Gly Ile Val Asp Lys Phe Gly Trp Cys Thr Trp	
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Asp Ala Phe Tyr Leu Asn Val Gln Pro His Gly Val Met Glu Gly Val	
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Gln Gly Leu Val Asp Gly Gly Cys Pro Pro Gly Leu Val Leu Ile Asp	
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Asp Gly Trp Gln Ser Ile Cys His Asp Asn Asp Ala Leu Thr Thr Glu	
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Cys Gly Tyr Trp Gly Gly Leu Arg Pro Asn Val Pro Gly Leu Pro Glu	
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Glu Ser Val Gly Ile Asp Gly Val Lys Val Asp Val Ile His Leu Leu	
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Met Val His Cys Ala Tyr Asn Ser Ile Trp Met Gly Asn Phe Ile His	
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Val Gly Lys His Asn Phe Glu Leu Leu Arg Ser Leu Val Leu Pro Asp	
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Gly Ser Ile Leu Arg Cys Asp Tyr Tyr Ala Leu Pro Thr Arg Asp Cys	
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Cys Gly Tyr Trp Gly Gly Leu Arg Pro Asn Val Pro Gly Leu Pro Glu



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Glu Ser Val Gly Ile Asp Gly Val Lys Val Asp Val Ile His Leu Leu						
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Tyr Tyr Lys Ala Leu Ser Ser Ser Val Asn Asn His Phe Asn Gly Asn						
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Gly Val Ile Ala Gly Leu Glu His Cys Asn Asp Phe Met Phe Leu Gly						
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Asp Pro Ser Gly Asp Pro Asn Gly Thr Phe Trp Leu Gln Gly Cys His						
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Ala Ala Ser Arg Ala Ile Ser Gly Gly Pro Ile Tyr Val Ser Asp Ser						
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Val Gly Lys His Asn Phe Glu Leu Leu Arg Ser Leu Val Leu Pro Asp						
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Gly Ser Ile Leu Arg Cys Asp Tyr Tyr Ala Leu Pro Thr Arg Asp Cys						
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 Arg Ala Ser Pro Ser Asp Val Glu Trp Lys Ser Gly Lys Ala Gly Pro  
 115 120 125

Gly	Val	Ser	Val	Lys	Asp	Val	Ser	Gln	Phe	Ala	Val	Tyr	Ala	Val	Glu
130						135					140				
Ala	Arg	Thr	Leu	Gln	Leu	Leu	Arg	Pro	Asp	Glu	Gly	Val	Asp	Leu	Thr
145					150					155					160
Leu	Gln	Pro	Phe	Thr	Tyr	Glu	Leu	Phe	Val	Val	Ala	Pro	Val	Arg	Val
				165					170					175	
Ile	Ser	His	Glu	Arg	Ala	Ile	Lys	Phe	Ala	Pro	Ile	Gly	Leu	Ala	Asn
			180					185					190		
Met	Leu	Asn	Thr	Ala	Gly	Ala	Val	Gln	Ala	Phe	Glu	Ala	Lys	Lys	Asp
		195					200					205			
Ala	Ser	Gly	Val	Thr	Ala	Glu	Val	Phe	Val	Lys	Gly	Ala	Gly	Glu	Leu
		210				215					220				
Val	Ala	Tyr	Ser	Ser	Ala	Thr	Pro	Arg	Leu	Cys	Lys	Val	Asn	Gly	Asp
225					230					235					240
Glu	Ala	Glu	Phe	Thr	Tyr	Lys	Asp	Gly	Val	Val	Thr	Val	Asp	Val	Pro
				245					250					255	
Trp	Ser	Gly	Ser	Ser	Ser	Lys	Leu	Cys	Cys	Val	Gln	Tyr	Val	Tyr	
			260					265					270		

<210> 9  
 <211> 30  
 <212> DNA  
 <213> Artificial Sequence

<220>  
 <223> Description of Artificial Sequence:synthetic  
 primer 1 (from list 1)

<400> 9  
 aattttcaag catagccaag ttaaccacct

30

<210> 10  
 <211> 24  
 <212> DNA  
 <213> Artificial Sequence

<220>  
 <223> Description of Artificial Sequence:synthetic  
 primer 2 (from list 1)

<400> 10  
 gtcacaaga taatgatggt agtc

24

<210> 11  
 <211> 22  
 <212> DNA  
 <213> Artificial Sequence

<220>

<223> Description of Artificial Sequence:synthetic  
primer 3 (from list 1)

<400> 11  
atacaagtga ggaacttgac ca 22

<210> 12  
<211> 24  
<212> DNA  
<213> Artificial Sequence

<220>  
<223> Description of Artificial Sequence:synthetic  
primer 4 (from list 1)

<400> 12  
ccaaaccata gcaaacctaa gcac 24

<210> 13  
<211> 28  
<212> DNA  
<213> Artificial Sequence

<220>  
<223> Description of Artificial Sequence:synthetic  
primer 5 (from list 1)

<400> 13  
acaacagaaa aatatgactc ttattact 28

<210> 14  
<211> 26  
<212> DNA  
<213> Artificial Sequence

<220>  
<223> Description of Artificial Sequence:synthetic  
primer 6 (from list 1)

<400> 14  
aaaagagagt caaacatcat agtatc 26

<210> 15  
<211> 29  
<212> DNA  
<213> Artificial Sequence

<220>  
<223> Description of Artificial Sequence:synthetic  
primer 1 (from list 2)

<400> 15  
atggcaccac caagcataac caaaactgc 29

<210> 16  
<211> 43

<212> DNA  
<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence:synthetic  
primer 2 (from list 2)

<400> 16

atggcaccac caagcataac caaaactgca accctccaag acg

43

<210> 17

<211> 25

<212> DNA

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence:synthetic  
primer 3 (from list 2)

<400> 17

tcaaaataaa aactggacca aagac

25

<210> 18

<211> 30

<212> DNA

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence:synthetic  
primer 4 (from list 2)

<400> 18

tcaaaataaa aactggacca aagacaatgt

30

<210> 19

<211> 25

<212> DNA

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence:synthetic  
primer 5 (from list 2)

<400> 19

atggctccaa gcataagcaa aactg

25

<210> 20

<211> 32

<212> DNA

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence:synthetic  
primer 6 (from list 2)

<400> 20

atggctccaa gcataagcaa aactgtggaa ct

32

<210> 21  
<211> 25  
<212> DNA  
<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence:synthetic  
primer 7 (from list 2)

<400> 21  
tcaaaataaa aactcaacca ttgac

25

<210> 22  
<211> 39  
<212> DNA  
<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence:synthetic  
primer 8 (from list 2)

<400> 22  
tcaaaataaa aactcaacca ttgacaattt tgaagcact

39

<210> 23  
<211> 20  
<212> PRT  
<213> Vicia faba

<400> 23

Gly Ile Lys Phe Met Ser Ile Phe Arg Phe Lys Val Trp Trp Thr Thr  
1 5 10 15

His Trp Val Gly  
20

<210> 24  
<211> 14  
<212> PRT  
<213> Vicia faba

<400> 24

Ile Ile Asp Lys Phe Gly Trp Cys Thr Trp Asp Ala Phe Tyr  
1 5 10

<210> 25  
<211> 15  
<212> PRT  
<213> Vicia faba

<400> 25

Gly Gly Cys Pro Pro Gly Phe Val Ile Ile Asp Asp Gly Trp Gln  
1 5 10 15

<210> 26  
<211> 17  
<212> PRT  
<213> Vicia faba

<400> 26  
Thr Ser Ala Gly Glu Gln Met Pro Cys Arg Leu Val Lys Tyr Glu Glu  
1 5 10 15

Asn

<210> 27  
<211> 16  
<212> PRT  
<213> Vicia faba

<400> 27  
Val Tyr Val Trp His Ala Leu Cys Gly Tyr Trp Gly Gly Val Arg Pro  
1 5 10 15

<210> 28  
<211> 20  
<212> PRT  
<213> Vicia faba

<400> 28  
Thr Met Glu Asp Leu Ala Val Asp Lys Ile Val Glu Asn Gly Val Gly  
1 5 10 15

Leu Val Pro Pro  
20

<210> 29  
<211> 23  
<212> PRT  
<213> Vicia faba

<400> 29  
Gly Leu His Ser His Leu Glu Ser Ala Gly Ile Asp Gly Val Lys Val  
1 5 10 15

Asp Val Ile His Leu Leu Glu  
20

<210> 30  
<211> 14  
<212> PRT  
<213> Vicia faba

<400> 30  
Gly Gly Arg Val Glu Leu Ala Arg Ala Tyr Tyr Lys Ala Leu  
1 5 10

<210> 31  
<211> 12



<212> PRT  
<213> Vicia faba

<400> 31  
Val Lys Lys His Phe Lys Gly Asn Gly Val Ile Ala  
1 5 10

<210> 32  
<211> 46  
<212> PRT  
<213> Vicia faba

<400> 32  
Glu His Cys Asn Asp Phe Phe Leu Leu Gly Thr Glu Ala Ile Ser Leu  
1 5 10 15  
Gly Arg Val Gly Asp Asp Phe Trp Cys Ser Asp Pro Ser Gly Asp Pro  
20 25 30  
Asn Gly Thr Tyr Trp Leu Gln Gly Cys His Met Val His Cys  
35 40 45

<210> 33  
<211> 43  
<212> PRT  
<213> Vicia faba

<400> 33  
Ala Tyr Asn Ser Leu Trp Met Gly Asn Phe Ile Gln Pro Asp Trp Asp  
1 5 10 15  
Met Phe Gln Ser Thr His Pro Cys Ala Glu Phe His Ala Ala Ser Arg  
20 25 30  
Ala Ile Ser Gly Gly Pro Ile Tyr Val Ser Asp  
35 40

<210> 34  
<211> 9  
<212> PRT  
<213> Vicia faba

<400> 34  
Leu Pro Asp Gly Ser Ile Leu Arg Cys  
1 5

<210> 35  
<211> 24  
<212> PRT  
<213> Vicia faba

<400> 35  
Ala Leu Pro Thr Arg Asp Cys Leu Phe Glu Asp Pro Leu His Asn Gly  
1 5 10 15  
Lys Thr Met Leu Lys Ile Trp Asn  
20

<210> 36  
<211> 13  
<212> PRT  
<213> Vicia faba

<400> 36  
Gly Val Leu Gly Leu Phe Asn Cys Gln Gly Gly Gly Trp  
1 5 10

<210> 37  
<211> 9  
<212> PRT  
<213> Vicia faba

<400> 37  
Phe Ala Pro Ile Gly Leu Val Asn Met  
1 5

<210> 38  
<211> 32  
<212> DNA  
<213> Artificial Sequence

<220>  
<221> modified\_base  
<222> (1)..(32)  
<223> n = inosine

<220>  
<223> Description of Artificial Sequence:synthetic  
primer 1-F (from list 4)

<400> 38  
ttnaangtnt ggtggacnac ncantgggtn gg

32

<210> 39  
<211> 41  
<212> DNA  
<213> Artificial Sequence

<220>  
<221> modified\_base  
<222> (1)..(41)  
<223> n = inosine

<220>  
<223> Description of Artificial Sequence:synthetic  
primer 2-F (from list 4)

<400> 39  
atnatngana anttnggntg gtgnacntgg gangcntnt a

41

<210> 40  
<211> 41  
<212> DNA

<213> Artificial Sequence

<220>

<221> modified\_base

<222> (1)..(41)

<223> n = inosine

<220>

<223> Description of Artificial Sequence:synthetic  
primer 2-RV (from list 4)

<400> 40

tanaangcnt cccangtnca ccancnaa n ttntcnatna t

41

<210> 41

<211> 44

<212> DNA

<213> Artificial Sequence

<220>

<221> modified\_base

<222> (1)..(44)

<223> n = inosine

<220>

<223> Description of Artificial Sequence:synthetic  
primer 3-F (from list 4)

<400> 41

ggnggntgnc cncnggntt ngtnatnatn gangangnt ggca

44

<210> 42

<211> 44

<212> DNA

<213> Artificial Sequence

<220>

<221> modified\_base

<222> (1)..(44)

<223> n = inosine

<220>

<223> Description of Artificial Sequence:synthetic  
primer 3-RV (from list 4)

<400> 42

tgccancnt cntcnatnat nacnaancn ggnggncanc cncc

44

<210> 43

<211> 32

<212> DNA

<213> Artificial Sequence

<220>

<221> modified\_base

<222> (1)..(32)

<223> n = inosine

<220>

<223> Description of Artificial Sequence:synthetic  
primer 4-F (from list 4)

<400> 43

aanaancant tnaanggnaa nggngtnatn gc

32

<210> 44

<211> 32

<212> DNA

<213> Artificial Sequence

<220>

<221> modified\_base

<222> (1)..(32)

<223> n = inosine

<220>

<223> Description of Artificial Sequence:synthetic  
primer 4-RV (from list 4)

<400> 44

gcnatnacnc cnttnccntt naantgnttn tt

32

<210> 45

<211> 38

<212> DNA

<213> Artificial Sequence

<220>

<221> modified\_base

<222> (1)..(38)

<223> n = inosine

<220>

<223> Description of Artificial Sequence:synthetic  
primer 5-F (from list 4)

<400> 45

tggatgggna anttnatnca nccngantgg ganatggt

38

<210> 46

<211> 38

<212> DNA

<213> Artificial Sequence

<220>

<221> modified\_base

<222> (1)..(38)

<223> n = inosine

<220>

<223> Description of Artificial Sequence:synthetic  
primer 5-RV (from list 4)

<400> 46

aacatntccc antcnggntg natnaanttn cccatcca

38

<210> 47  
<211> 27  
<212> DNA  
<213> Artificial Sequence

<220>  
<221> modified\_base  
<222> (1)..(27)  
<223> n = inosine

<220>  
<223> Description of Artificial Sequence:synthetic  
primer 6-RV (from list 4)

<400> 47  
catnttnacn arnccnatng gngcnaa

27

<210> 48  
<211> 26  
<212> DNA  
<213> Artificial Sequence

<220>  
<223> Description of Artificial Sequence:synthetic  
primer 8.2 (from list 5)

<400> 48  
aaraacngcnc cnagyathat hgacaa

26

<210> 49  
<211> 20  
<212> DNA  
<213> Artificial Sequence

<220>  
<223> Description of Artificial Sequence:synthetic  
primer 13.4 (from list 5)

<400> 49  
aarathtgga ayctnaacaa

20

<210> 50  
<211> 24  
<212> DNA  
<213> Artificial Sequence

<220>  
<223> Description of Artificial Sequence:synthetic  
primer 7.4 (from list 5)

<400> 50  
aargcnagrg tngtngtncc naag

24

<210> 51  
<211> 21  
<212> DNA

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence:synthetic  
primer 13.3RV (from list 5)

<400> 51

yttrttnagr ttccadattt t

21

<210> 52

<211> 21

<212> DNA

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence:synthetic  
primer 10.3RV (from list 5)

<400> 52

yttrtcytc tanagraatt t

21

<210> 53

<211> 30

<212> DNA

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence:synthetic  
primer RES-2RV (from list 6)

<400> 53

ggctgagggt cggttcattc ctgaatcatc

30

<210> 54

<211> 30

<212> DNA

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence:synthetic  
primer RS-7 (from list 6)

<400> 54

ccaaatggta catattggct ccaaggttg

30

<210> 55

<211> 30

<212> DNA

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence:synthetic  
primer RS-8 (from list 6)

<400> 55

aagagtgtat ctgaattttc acgcgcggtg

30

<210> 56  
 <211> 30  
 <212> DNA  
 <213> Artificial Sequence  
  
 <220>  
 <223> Description of Artificial Sequence:synthetic  
       primer RS-9 (from list 6)  
  
 <400> 56  
 tgggtgcaatg ggaaaactcc aatgagcacc 30  
  
 <210> 57  
 <211> 30  
 <212> DNA  
 <213> Artificial Sequence  
  
 <220>  
 <223> Description of Artificial Sequence:synthetic  
       primer RS-10 (from list 6)  
  
 <400> 57  
 atgaagtgtt ctgatagatt gaaagtttcg 30  
  
 <210> 58  
 <211> 30  
 <212> DNA  
 <213> Artificial Sequence  
  
 <220>  
 <223> Description of Artificial Sequence:synthetic  
       primer RS-11 (from list 6)  
  
 <400> 58  
 cagtctctgg agtttgatga taatgcaagt 30  
  
 <210> 59  
 <211> 41  
 <212> DNA  
 <213> Artificial Sequence  
  
 <220>  
 <223> Description of Artificial Sequence:synthetic  
       primer RS-N (from list 7)  
  
 <400> 59  
 cgcgatcca ccatggcacc accaagcata accaaaactg c 41  
  
 <210> 60  
 <211> 37  
 <212> DNA  
 <213> Artificial Sequence  
  
 <220>  
 <223> Description of Artificial Sequence:synthetic  
       primer RS-C (from list 7)

<220>  
 <221> modified\_base  
 <222> (1)..(37)  
 <223> n = inosine  
  
 <400> 60  
 tgctctagat tatcaaaata aaaactggac caaagac 37

<210> 61  
 <211> 35  
 <212> DNA  
 <213> Artificial Sequence  
  
 <220>  
 <223> Description of Artificial Sequence:synthetic  
 primer 1-F (from list 8)

<220>  
 <221> modified\_base  
 <222> (1)..(35)  
 <223> n= inosine  
  
 <400> 61  
 cgattnaang tntggtggac nacncantgg gtngg 35

<210> 62  
 <211> 45  
 <212> DNA  
 <213> Artificial Sequence  
  
 <220>  
 <223> Description of Artificial Sequence:synthetic  
 primer 2-RV (from list 8)

<220>  
 <221> modified\_base  
 <222> (1)..(45)  
 <223> n = inosine  
  
 <400> 62  
 ggcctanaan gcntccang tncaccancc naanttntcn atnat 45

<210> 63  
 <211> 41  
 <212> DNA  
 <213> Artificial Sequence  
  
 <220>  
 <223> Description of Artificial Sequence:synthetic  
 primer 5-F (from list 8)

<220>  
 <221> modified\_base  
 <222> (1)..(41)  
 <223> n = inosine  
  
 <400> 63



cgatggatgg gnaanttnat ncancngan tggganatgt t

41

<210> 64

<211> 32

<212> DNA

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence:synthetic  
primer 6-RV (from list 8)

<220>

<221> modified\_base

<222> (1)..(32)

<223> n = inosine

<400> 64

ggccacatnt tnacnarncc natngngncn aa

32

<210> 65

<211> 30

<212> DNA

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence:synthetic  
primer SN-1 (from list 9)

<400> 65

cacgaactgg ggcacgagac acagatgatg

30

<210> 66

<211> 30

<212> DNA

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence:synthetic  
primer SC-3RV (from list 9)

<400> 66

aagcaagtca cggagtgtga atagtcagag

30

<210> 67

<211> 30

<212> DNA

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence:synthetic  
primer SC-5 (from list 9)

<400> 67

acacgagact gtttgtttga agaccccttg

30

<210> 68

<211> 25  
<212> DNA  
<213> Artificial Sequence

<220>  
<223> Description of Artificial Sequence:synthetic  
primer SC-6 (from list 9)

<400> 68  
tggaatctca acaaataatac aggtg 25

<210> 69  
<211> 30  
<212> DNA  
<213> Artificial Sequence

<220>  
<223> Description of Artificial Sequence:synthetic  
primer SN-3RV (from list 9)

<400> 69  
gggtcatggc caacgtggac gtataagcac 30

<210> 70  
<211> 30  
<212> DNA  
<213> Artificial Sequence

<220>  
<223> Description of Artificial Sequence:synthetic  
primer SN-4RV (from list 9)

<400> 70  
gatgatcact ggcgcggttt tctcctcgag 30

<210> 71  
<211> 35  
<212> DNA  
<213> Artificial Sequence

<220>  
<223> Description of Artificial Sequence:synthetic  
primer 1-F (from list 10)

<220>  
<221> modified\_base  
<222> (1)..(35)  
<223> n = inosine

<400> 71  
cgattnaang tntggtggac nacncantgg gtngg 35

<210> 72  
<211> 37  
<212> DNA  
<213> Artificial Sequence

<220>  
<223> Description of Artificial Sequence:synthetic  
primer 4-RV (from list 10)

<220>  
<221> modified\_base  
<222> (1)..(37)  
<223> n = inosine

<400> 72  
ggccagcnat nacnccnttn ccnttnaant gnttntt

37

<210> 73  
<211> 44  
<212> DNA  
<213> Artificial Sequence

<220>  
<223> Description of Artificial Sequence:synthetic  
primer 2-F (from list 10)

<220>  
<221> modified\_base  
<222> (1)..(44)  
<223> n = inosine

<400> 73  
cgaatnatng anaanttngg ntggtgnacn tgggangcnt tnta

44

<210> 74  
<211> 32  
<212> DNA  
<213> Artificial Sequence

<220>  
<223> Description of Artificial Sequence:synthetic  
primer 6-RV (from list 10)

<220>  
<221> modified\_base  
<222> (1)..(32)  
<223> n = inosine

<400> 74  
ggccacatnt tnacnarncc natnggngcn aa

32

<210> 75  
<211> 41  
<212> DNA  
<213> Artificial Sequence

<220>  
<223> Description of Artificial Sequence:synthetic  
primer 5-F (from list 11)

<220>  
<221> modified\_base  
<222> (1)..(41)

<223> n= inosine

<400> 75

cgatggatgg gnaanttnat ncancngan tggganatgt t

41

<210> 76

<211> 32

<212> DNA

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence:synthetic  
primer 6-RV (from list 11)

<220>

<221> modified\_base

<222> (1)..(32)

<223> n = inosine

<400> 76

ggccacatnt tnacnarncc natngngcn aa

32

<210> 77

<211> 25

<212> DNA

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence:synthetic  
primer M10 (from list 12)

<400> 77

gacgtcgagt ggaagagcgg caagg

25

<210> 78

<211> 25

<212> DNA

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence:synthetic  
primer M-11 (from list 12)

<400> 78

cacctacgag ctcttcgctg ttgcc

25

<210> 79

<211> 25

<212> DNA

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence:synthetic  
primer BamSac-(+) (from list 13)

<400> 79

gatcgagctc gtgtcggatc cagct

25

<210> 80  
<211> 17  
<212> DNA  
<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence:synthetic  
primer BamSac-(-) (from list 13)

<400> 80  
ggatccgaca cgagctc

17

<210> 81  
<211> 30  
<212> DNA  
<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence:synthetic  
primer 35S (from list 14)

<400> 81  
ttccagtatg gacgattcaa ggcttgcttc

30

<210> 82  
<211> 25  
<212> DNA  
<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence:synthetic  
primer NOS (from list 14)

<400> 82  
atgtataatt gcgggactct aatca

25

<210> 83  
<211> 30  
<212> DNA  
<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence:synthetic  
primer RS-F (from list 14)

<400> 83  
aagagtgtat ctgaattttc acgcgcggtg

30

<210> 84  
<211> 33  
<212> DNA  
<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence:synthetic

primer RS-RV (from list 14)

<400> 84  
accttcccat acaccttttg gatgaacctt caa 33

<210> 85  
<211> 38  
<212> DNA  
<213> Artificial Sequence

<220>  
<223> Description of Artificial Sequence:BamHI-NcoI  
linker (from Fig. 1)

<400> 85  
ggatccacca tggcaccacc aagcataacc aaaactgc 38

<210> 86  
<211> 36  
<212> DNA  
<213> Artificial Sequence

<220>  
<223> Description of Artificial Sequence:XbaI-NotI-SacI  
linker (from Fig. 1)

<400> 86  
tgataatcta gagcggccgc caccgcggtg gagctc 36

<210> 87  
<211> 34  
<212> DNA  
<213> Artificial Sequence

<220>  
<223> Description of Artificial Sequence:XbaI-NotI-SacI  
linker (from Fig. 1)

<400> 87  
tctagattat caaaataaaa actggaccaa agac 34